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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,601	11/21/2001	John E. Krech	57135US002	3879

32692 7590 06/02/2005

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EXAMINER

AUGHENBAUGH, WALTER

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/990,601

Applicant(s)

KRECH ET AL.

Examiner

Walter B. Aughenbaugh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30,32-37,46-53 and 55-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30,32-37,46-53 and 55-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Acknowledgement of Applicant's Amendments

1. The amendments made in claim 62 in the Amendment filed March 3, 2005 (Amdt. F) have been received and considered by Examiner.

WITHDRAWN REJECTIONS

2. The 35 U.S.C. 112 rejection of claim 62 made of record in paragraph 5 of the previous Office Action mailed November 30, 2004 has been withdrawn due to Applicant's amendments in claim 62 in Amdt. F.

REPEATED REJECTIONS

3. The 35 U.S.C. 103 rejections of claims 30, 32-37, 46-53 and 55-61 that were repeated in paragraph 4 of the previous Office Action mailed November 30, 2004 have been repeated for the reasons previously made of record.
4. The 35 U.S.C. 103 rejection of claim 62 made of record in paragraph 6 of the previous Office Action mailed November 30, 2004 has been repeated for the reasons previously made of record.

Response to Arguments

5. Applicant's arguments on pages 7-12 of Amdt. F regarding the 35 U.S.C. 103 rejection of claims 30, 32, 34-37, 47, 49-53, 55 and 57-61 have been fully considered but are not persuasive.

Applicant argues that "[n]owhere is the container said to be a plastic pallet [in Oishi et al.]", but it is acknowledged in paragraph 11 of the Office Action mailed June 30, 2004 that "Oishi et al. fail to explicitly teach that the plastic article (i.e. the part or component of transportation equipment or container) is a pallet". As stated in paragraph 11 of the Office Action

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mailed June 30, 2004, Oishi et al. does teach that the container is a part or component of transportation equipment or a container, col. 69, lines 1-3. While a pallet falls within the scope of the teaching of Oishi et al. of “part or component of transportation equipment or container”, Endo et al. is relied upon for an explicit teaching of a pallet.

Applicant takes issue with the argument on “page 10, lines 10-14” of the Office Action that was mailed June 30, 2004, not the Office Action that was mailed November 30, 2004, that uses the phrase “sufficient overlap”: the diguanamines of the Second Invention of Oishi et al. are the diguanamines of the Third Invention of Oishi et al., and in the discussion of the Second Invention of Oishi et al., Oishi et al. explicitly teach that the diguanamines are flame-retardant, so the diguanamines of the Third Invention (which are the same as the diguanamines of the Second Invention) are necessarily flame retardant. The phrase “sufficient overlap” refers to this fact.

A blend of one or more polyolefin resin/s and a one or more thermosetting resin/s is explicitly taught at col. 29, lines 1-6 of Oishi et al. Rubbers are thermosetting resins.

Applicant states on page 8 of Amdt. F that Oishi et al. does not “suggest[]” a pallet, but the teaching of Oishi et al. of a “part or component of transportation equipment” (col. 69, lines 1-3) does indeed suggest a pallet to one of ordinary skill in the art (Endo et al. establishes that the pallet structure is a well known structure to those of ordinary skill in the art).

Applicant states on page 9 of Amdt. F that col. 29, lines 6-56 “lists many thermoplastic resins, and concludes on lines 55-56 with ‘blends, block copolymers, graft copolymers, and rubber-modified polymers of these resins’”: rubbers are thermosetting resins, so this portion of Oishi et al. that Applicant cites is an explicit teaching of a blend of thermoplastic resin/s and thermosetting resins, and this portion is a repetition of what is stated at col. 29, lines 1-6. The

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teaching at col. 29, lines 55-56 clarifies what is meant by that which is stated at col. 29, lines 1-6. Applicant states that Oishi et al. “avoid” a blend of thermosetting resins and thermoplastic resins, but this is not the case because Oishi et al. explicitly teach a blend of thermosetting resins and thermoplastic resins as discussed in the previous two sentences.

In regard to Applicant’s discussion on pages 9-10 of Amdt. F regarding claim 59, as indicated in the rejection of this claim, the scope delineated by Applicant’s originally filed definition of “semi-interpenetrating polymer network” includes polymer blends. Applicant’s discussion on pages 9-10 of Amdt. F supports this position: Applicant describes a semi-interpenetrating polymer network as “having one polymer interwoven with the other”, and this cited phrase would be accurately used to describe many polymer blends.

In regard to Applicant’s argument regarding claims 32, 52 and 53, Oishi et al. teaches blending thermoplastic resins with thermosetting resins at col. 29, lines 1-6, and epoxy resin is provided as an example thermosetting resin at col. 29, lines 61-62.

In lines 4-5 of page 11 of Amdt. F, Applicant argues that the word ““container” does not teach or suggest a plastic pallet”, but, as discussed above, the teaching of Oishi et al. of a “part or component of transportation equipment” (col. 69, lines 1-3) does suggest a pallet to one of ordinary skill in the art (Endo et al. establishes that the pallet structure is a well known structure to those of ordinary skill in the art).

In regard to Applicant’s argument regarding claims 34, 47 and 51, Oishi et al. teaches the combination of glass beads with the flame retarding diguanamines (the diguanamines of the Second Invention are the same as the diguanamines of the Third Invention) at col. 32, line 51-col. 33, line 2, so Oishi et al. teaches that the glass beads are used in combination with the

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diguanamines regardless of form of the article that is formed from the polymeric composition of Oishi et al.

Oishi et al. teach the composition claimed in claims 49 and 50 (except for the relative amounts) (col. 29, lines 1-6).

6. Applicant's arguments on pages 12-13 of Amdt. F regarding the 35 U.S.C. 103 rejection of claim 33 have been fully considered but are not persuasive. Applicant argues that "Applicant is using the word "structural" in accordance with the dictionary definition that has been made of record that defines the word as a weight-bearing part", but the application as originally filed does not limit the term "structural" to the definition to which Applicant refers.

7. Applicant's arguments on pages 13-14 of Amdt. F regarding the 35 U.S.C. 103 rejection of claim 46 have been fully considered but are not persuasive. Applicant's arguments depend entirely upon Applicant's arguments regarding the 35 U.S.C. 103 rejection of claims 30, 32, 34-37, 47, 49-53, 55 and 57-61 that have been addressed above.

8. Applicant's arguments on page 14 of Amdt. F regarding the 35 U.S.C. 103 rejection of claim 48 have been fully considered but are not persuasive. Applicant's arguments depend entirely upon Applicant's arguments regarding the 35 U.S.C. 103 rejection of claims 30, 32, 34-37, 47, 49-53, 55 and 57-61 that have been addressed above. Applicant argues that Oishi et al. do not teach or suggest a plastic pallet, but, as discussed above, the teaching of Oishi et al. of a "part or component of transportation equipment" (col. 69, lines 1-3) does suggest a pallet to one of ordinary skill in the art (Endo et al. establishes that the pallet structure is a well known structure to those of ordinary skill in the art).

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9. Applicant's arguments on pages 14-15 of Amdt. F regarding the 35 U.S.C. 103 rejection of claim 56 have been fully considered but are not persuasive. Applicant argues "Contrary to the rejection statement (page 10, lines 3-5) Oishi et al. does not teach a pallet", but the rejection states "the pallet of Oishi et al. and Endo et al.": i.e. the pallet taught by Oishi et al. and Endo et al.". Oishi et al. and Endo et al. teach the pallet claimed by Applicant for the reasons made of record in paragraph 11 of the Office Action mailed June 30, 2004. The 103 rejection of claim 30 acknowledges that Oishi et al. fail to explicitly teach a pallet, but that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the part or component of transportation equipment or container of Oishi et al. in the form of a pallet since it is notoriously well known to form flame retardant containing plastic pallets as taught by Endo et al. Applicant's argument that "It is not expected that a coating will add structural support to an article" is irrelevant to the rejection of claim 56. While Perez et al. do not explicitly teach pallets, the teaching of Perez et al. of a "storage vessel" encompasses pallets. Perez et al. need not explicitly teach pallets because Endo et al. do explicitly teach pallets and the teaching of a "part or component of transportation equipment" of Oishi et al. and the teaching of a "storage vessel" of Perez et al. both encompass pallets.

10. Applicant's arguments on pages 16-17 of Amdt. F regarding the 35 U.S.C. 103 rejection of claim 62 have been fully considered but are not persuasive.

Applicant argues that Oishi et al. teach different inventions in the same patent, but the diguanamines of the three Inventions of Oishi et al. are the same diguanamines, and in the discussion of the Second Invention of Oishi et al., Oishi et al. explicitly teach that the diguanamines are flame-retardant, so the diguanamines of the Third Invention, and of the First

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Invention, (which are the same as the diguanamines of the Second Invention) are necessarily flame retardant. Applicant argues that Oishi et al. do not teach or suggest a pallet, but, as discussed above, the teaching of Oishi et al. of a “part or component of transportation equipment” (col. 69, lines 1-3) does suggest a pallet to one of ordinary skill in the art (Endo et al. establishes that the pallet structure is a well known structure to those of ordinary skill in the art). Applicant argues that Oishi et al. do not teach a blend of polyolefin and thermosetting resins, but a blend of one or more polyolefin resin/s and a one or more thermosetting resin/s is explicitly taught at col. 29, lines 1-6 of Oishi et al.

Applicant’s argument regarding the dictionary definition “antifouling” on page 17 is irrelevant; as Applicant concedes, and as stated in paragraph 6 of the Office Action mailed November 30, 2004, Oishi et al. explicitly teach that the diguanamines have antifouling property. Applicant’s discussion regarding “underwater structures” is irrelevant because Applicant extracts this phrase from the dictionary definition found by Applicant, not from the art of record.

Applicant’s piecemeal analysis of each of Endo et al., Ueeda et al. and Dyckman et al. in the first, second and third paragraphs, respectively, of page 17 is irrelevant because the proposed combination of references made of record paragraph 6 of the Office Action mailed November 30, 2004 teaches that which is claimed in claim 62.

As Applicant concedes, and as stated in paragraph 6 of the Office Action mailed November 30, 2004, Oishi et al. explicitly teach that the diguanamines have antifouling property; Dyckman et al. is not relied upon for a teaching of antifouling agents: Dyckman et al. is relied upon for a teaching of inclusion of a biocide into the composition of Oishi et al. (see paragraph 6 of the Office Action mailed November 30, 2004).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 6:00pm and on alternate Fridays from 9:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh
05/31/05

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